APPENDIX F

Summary Report of first Turtle Advisory Committee (TAC) Meeting



Summary Meeting Report TURTLE ADVISORY COMMITTEE July 29 - 30, 2003

Summary

The first Turtle Advisory Committee (TAC) meeting convened July 29 and 30, 2003 in the offices of the Western Pacific Regional Fishery Management Council, Honolulu, Hawaii. The development and designation of the TAC was based on recommendations from Council members during 115th Council meeting and finalized at the 117th Council meeting (Feb 2003). The TAC's primary duties are to direct and advise the Council in its activities related to sea turtle conservation and sea turtle related fishery management initiatives.

This first day of the meeting dealt primarily with progress of the Council and the Pacific Island's Regional Office sea turtle conservation program. The TAC considered the programs developed and implemented for FY02 and FY03, and provide valuable recommendations for future direction and activities. They discussed protocol for submitted proposals, identified priorities for the Council's sea turtle conservation plan and discussed possible agendas for the second Western Pacific Sea Turtle Cooperative Research and Management Workshop.

The second day of the meeting was dedicated entirely to conservation measures under consideration in the settlement discussions with the Hawaii Longline Association (HLA). These conservation measures pertain to activities that could be undertaken by HLA or the Council to conserve or provide benefit to sea turtles stocks that are currently being impacted by the Hawaii-based pelagic longline fishery (namely leatherback and loggerhead turtles). The other aspect of discussions involved the legal issues pertaining to using conservation measures to benefit populations or stocks outside of the fishing grounds to offset takes within the fishing grounds. Craig Johnson from the office of Protected Resources (PR), NOAA Fisheries Headquarters was in attendance to provide valuable insights to the legal aspects of evaluating conservation measures in the HLA proposal or how they may be incorporated in biological opinions and environmental impact statements (EIS).

For clarity, principal recommendations from the TAC are separated into the two areas, conservation program and conservation measures.

Conservation Program

Irene Kinan (Council) and Ray Clarke (PIRO) presented the sea turtle conservation projects developed and implemented for FY02 and FY03. After considering these projects, the TAC were supportive yet critical in that the implemented projects appear to have a "northern bias" in a region which does not have as many turtles as the South Pacific (e.g. CNMI, Guam, Palau, Am. Samoa, FSM, RMI) (Table 1). However, it was noted that many (most) of these projects are needed to address areas which have been neglected in the past. It is noted that there appeared to be a focus on "quick fix" projects (i.e., database development, satellite telemetry and aerial surveys). These projects may not be particularly useful from a policy/ management perspective. While providing information, (some useful demographic data) they will not provide answers to address immediate management issues to address population recovery.

Table 1. Council and PIRO	directed sea turtle conservation activities. Primary			
funding agency in parentheses.				
A. Research: To fill	Aerial Surveys (PIRO); Satellite Tagging (PIRO);			
information gaps	Tagging Database development (Council);			
	Population Assessments: Guam (PIRO); CNMI			
	(PIRO); America Samoa (PIRO); Palau (PIRO);			
	FSM (PIRO)			
B. Measures to reduce	Post Doc economics study (PIRO/SWFSC)			
direct harvest				
C. Habitat Protection –	None yet			
LB/LH stock				
enhancement				
D. Education / Outreach	RMI "Cultural Survey" (PIRO);			
	Guam education poster (Council)			
E. International Liaison/	Meetings (Council): Japan Fisheries Agency;			
Networking Activities	International Fishers Forums; Belagio, Italy (Nov.			
	2003 - Conservation & Management of Sea			
	Turtles in the Pacific); 2 nd Sea Turtle Research &			
	Management Workshop (May 2004)			
F. Fishery Mitigation	FSM (PIRO);			
Measures Exchange	International Fishers Forum (Council)			

The TAC Recommended:

- 1. Council sea turtle conservation program focus needs to be redirected towards long term projects to obtain demographic and population abundance data on key populations of SW Pacific leatherbacks and North Pacific loggerheads (i.e. those species which interact with the fishery).
- 2. Redirect focus and resources towards Education & Outreach. Posters/fliers/handouts & education of "most appropriate" harvest parameters will go a long

way to protect what green and hawksbill sea turtle species may still occur in the U.S. Flag and Compact States.

- 3. Population assessment surveys (in the U.S. Flag and Compact States) should be augmented with proven techniques in laparoscopy to provide more useful information on nesting population dynamics (nesting periodicity, status, fecundity, etc.).
- 4. Council to develop a "policy statement" for submitted proposals stating what sort of projects the Council will consider (e.g. LH & LB of highest priority, GR & HB of secondary priority).
- 5. Possible agenda for the Council's future Sea Turtle Workshop (2004): 1) Council to report on progress and program growth to date; 2) focus on 1 management issue (i.e. stock abundance of LH and/or LB, or both).
- 6. Reorganize the Council's developing turtle tagging database by organization rather than by person or geographic area. Purpose is to identify "repositories of data" not "who" (individuals) that may have data. Provide a range of dates pertinent to organizations with this data. An example of literature may be entered into database, but recognize that a comprehensive literature database is already in existence (e.g. Archie Carr Center Sea Turtle Bibliography). To include all literature implies that someone needs to service and update the database. Consider building a link to Archie Carr Bibliography (contact Alan Bolten for advice).
- 7. Extend research outside the typical jurisdiction to incorporate Fiji, Vanuatu, Solomons, New Caledonia. In particular, work to identify leatherback nesting areas, and identify and quantify any fishery or direct harvest related threats that may be impacting leatherbacks, loggerhead or hawksbills. Research efforts could be effectively coordinated with the assistance of local community groups or NGO's (i.e., TNC or WWF).

Conservation Measures

The second half of the meeting (day two) was dedicated to conservation measures, and concluded with the fishery management regimes under consideration for the southern area closure. Craig Johnson began the day by describing NMFS office of Protected Resource's policy and criteria for evaluating conservation measures. The agency will consider any beneficial actions, however, they will evaluate them on two specific criteria: 1) how certain the measures will be to be implemented, and 2) the certainty of the measures being effective. The general formula for evaluating effectiveness is "exposure, response and risk" of the species and/or stock that will be subjected to the conservation measures. These criteria will ultimately determine how much difference conservation measures will make in a consultation.

Issues that will impact the certainty of implementation or effectiveness for improving the status of sea turtles include (but are not limited to): funding and its likely duration; which organizations/agencies/communities are to be involved in the measure; history of local conservation measures and local interest therein; committed personnel and development of local capacity; likely implementation time; duration and/or permanency of measures; feedback to local people; scientific underpinning of the measures; assessment of any measure relative to the proportion of the turtle population being affected (e.g. what proportion of total nesting area is to be protected); assessment of whether measures are targeting populations which interact with Hawaii LL fishery (including Eastern Pacific leatherbacks); contingency plans or adaptive management capacity for change in measures to cope with changes in local circumstances; and a time frame addressing when the proposed action will start and when do benefits start showing.

The discussion, led by Jeff Polovina, considered the specific conservation measures at hand (Table 2). Peter Dutton identified three leatherback conservation measures and the first loggerhead measure; the second loggerhead measure (in Japan) was described by George Balazs. Cost estimates are dependent on preexisting programs. In other words, proposed projects are designed to augment programs already in existence to support additional conservation objectives.

Table 2. Conservation measures proposed to facilitate recovery of leatherback and					
loggerhead population	loggerhead populations impacted by the Hawaii-based pelagic longline fishery.				
Leatherback turtles (Dermochelys coriacea)					
1. Papua, War-Mon	Contract with WWF-Indo to hire villagers to protect the beach				
nesting beach	(approx. 1,00 nests/yr) from predation by feral pigs. Protection				
	achieved with electric fences to keep pigs off beach and relocate				
	eggs to more secure areas. Also, elimination of take of about 10				
	nesting females/yr. Costs \$30K/yr				
2. West Papua,	Contract with WWF-Indo to work with villagers to				
coastal foraging	reduce/eliminate the harpooning of about 100 leatherback turtles				
grounds	per year in coastal foraging grounds. Cost\$20K/yr				
3. Papua New	Contract with NGO's to work with up to 3 villages to eliminate				
Guinea nesting	harvesting of effs, dog predation on eggs, and relocate eggs likely				
beach	to be losts to beach erosion. Savings of 1,000-1,5000 nests/yr.				
	Costs \$45K/yr				
Loggerhead turtles (Caretta caretta)				
4. Baja, Mexico	Contract with WildCoast to conduct mortality reduction				
halibut gillnet	workshop with fishermen and place observers on local boats to				
fishery	insure that all live loggerheads that comprise the estimated 3,000				
	juvenile loggerheads caught in halibut gillnets are returned to the				
	ocean. Gillnet mortality ie not presently known, but if even 10%				
	are alive and saved that would be a savings of 300 juvenile				
	loggerheads. Cost \$50K/yr				
5. Japan nesting	Colleagues in Japan have proposed relocating eggs from areas				
beaches	prone to erosion or that experience extreme temperatures at two				
	nesting beaches to save approx. 53 loggerhead nests. Cost \$10/yr				

TAC Recommendations

- 1. The TAC concluded that conservation measures are valuable and hold scientific merit.
- 2. Conservation measures should be incorporated into the suite of management measures currently being considered by the Council and NMFS for the Hawaii-based longline fishery. However, measures should be described in more detail to assist in determining the certainty of their implementation, and effectiveness for improving the status of these stocks (e.g. nesting beached be described in terms of proportion of beach to be protected rather than number of nests).
- 3. The leatherback measures were considered to hold greater merit than the loggerhead measures, however, these [loggerhead measures] were viewed as important in regards to establishing working relationships especially in Japan. Once again, if the emphasis is for long term commitments, then it is valuable to establish positive relations with programs.
- 4. LB conservation measures should include the Eastern as well as Western Pacific stocks (e.g. 1 out of 17 (6%) of turtles sampled from HLL fishery were from the East Pacific; where population declines have been very severe).
- 5. Inventory mortality in directed harvests fisheries (e.g. Kei Islands traditional LB harvest) and previously unreported fishery interactions (trap fisheries in southern Australia for LHs). Try to identify if the traditional Kei Island LB take is increasing due to technological advances (i.e., use of motor boat, high powered weapons and nylon line versus woven lines or traditional canoes, etc.)
- 6. Work to develop partnership arrangements with agencies and organizations overseas to develop and implement conservation actions, e.g. between Council and Qld Parks for southern LBs and HB, Council and TNC regarding Solomon Island HB, and between HLA and Sea Turtle Association of Japan for northern LHs.
- 7. Regarding No. 4 and 5, be sensitive in the way information is presented for foreign versus local consumption, and how this might be interpreted.
- 8. The TAC will develop a "risk matrix" of threats and relative impacts on sea turtles for assisting in evaluating the effectiveness of turtle conservation measures.

Southern Area Closure

Following the intensive discussions regarding conservation measures, Paul Dalzell introduced the fishery management alternatives for the Southern Area Closure. This was more informative in nature and the TAC had no major suggestions to offer. Jim Linch presented the HLA's proposal which encompasses the conservation measures

(previously discussed) for the mediation discussions in the hopes of settling the litigation dispute. The major recommendation by the TAC was that they not forget the Eastern Pacific leatherback stock in their proposal (see #3 above). It was suggested that HLA be specific in regards to which stock (west or east Pacific leatherback; north or south Pacific loggerhead) conservation measures are meant to address.

Recovery Plans

The meeting concluded with Tina Fahy's (sea turtle recovery coordinator for the NMFS South West region) quick mention of where NMFS stands in regards to the U.S. sea turtle recovery plans. The goal is to look at the plans and determine whether or not they need to be revised or added to. It needs to be determined if the status of species has changed, if new threats need to be considered, or if criteria for recovery has changed. It is accepted that a lot of revisions and updating may be needed, and it will be a very public process (i.e., Federal Register Notice, public input, stakeholders, scoping). In defense of the recovery plans, however, both Dutton and Balazs supported the fact that the plans really reflect what they do and how they have built their programs. They recognize that a lot of progress has been made in the past few years, and the plans should reflect this new information, but the fundamental elements are relevant and still stand.

Conclusion

The main recommendations emerging from this first TAC meeting, from the Council's perspective, will concern conservation measures. The consensus was that they were good measures. The group has asked Dutton and Balazs to go back to their colleagues to flesh out proposals in more detail, bearing in mind how they are going to be reviewed in Protected Resources in terms of certainty of implementation, effectiveness, cultural sensitivity, duration, longevity, et cetera.

Another strong recommendation that emerged from this meeting was a stronger sense for the division of labor and efforts between the Council and PIRO. It was recommended that the Council prioritize its sea turtle conservation program to those species which interact with the longline fishery, namely leatherbacks and loggerheads. Resources for greens and hawksbills at this time are best applied in education and outreach, especially in the north/central Pacific region. It is recognized that PIRO's sea turtle conservation and recovery activities, although they may work in unison with the Council, may also be prioritized differently. There was a strong consensus that large gaps in knowledge still exist in regards to population demographics, especially in the South West Pacific (Fiji, New Caledonia, Vanuatu and the Solomon Islands). Preliminary satellite telemetry data suggests that leatherbacks migrating between Fiji, New Caledonia and Australia appear to be under threat; impacted by unknown causes. The Council is encouraged to investigate the source of this threat by use of its many fishery related contacts in the region. It is suggested that the TAC will convene annually, and the next meeting may see additions to the Committee by East Pacific leatherback and the North Pacific loggerhead experts.

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